

## **LISTING OF THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Canceled)**

2. **(Original)** A heat treatment apparatus for irradiating a substrate with flashlight to heat said substrate, comprising:

a light source having a plurality of flash lamps;

a chamber provided below said light source;

a holding member for holding a substrate in said chamber; and

a light shield provided in said chamber, said light shield blocking light emitted from said light source from reaching a metal surface inside said chamber.

~~The heat treatment apparatus according to claim 1~~, wherein said light shield is a quartz member with a quartz surface roughened by honing.

3. **(Original)** The heat treatment apparatus according to claim 2, wherein said chamber has a metallic side plate and a metallic bottom plate; and wherein said light shield has a closed-end cylindrical shape for covering inner wall surfaces of said side plate and said bottom plate.

4. **(Original)** The heat treatment apparatus according to claim 3, wherein said light shield is a divided member in which a tubular portion and a base portion are separable.

5. **(Original)** The heat treatment apparatus according to claim 4, wherein said light shield covers said metal surface inside said chamber in its entirety.

6. **(Original)** The heat treatment apparatus according to claim 5,

wherein said quartz surface has an outer surface and an inner surface, said outer surface facing said metal surface inside said chamber and being roughed by honing, said inner surface having greater smoothness than said outer surface.

7. **(Original)** The heat treatment apparatus according to claim 6,  
wherein said outer surface has average surface roughness of not less than  $0.2\ \mu m$ .

8. **(Currently Amended)** A heat treatment apparatus for irradiating a substrate with flashlight to heat said substrate, comprising:

a light source having a plurality of flash lamps;

a chamber provided below said light source;

a holding member for holding a substrate in a substantially horizontal position in said chamber; and

a liner removably provided ~~[[to]]~~ at said chamber, along an inner wall side surface and an inner wall base surface of said chamber to cover said side and base surfaces, said liner having a roughened outer surface facing said side and base surfaces of said chamber and an inner surface having greater smoothness than said outer surface.

9. **(Original)** The heat treatment apparatus according to claim 8,  
wherein said liner has a closed-end cylindrical shape.

10. **(Original)** The heat treatment apparatus according to claim 9,  
wherein said liner is a divided member in which a tubular portion and a base portion are separable.

11. **(Original)** The heat treatment apparatus according to claim 10,  
wherein said liner is a quartz member.

12. **(Canceled)**

**13. (Previously Presented)** A heat treatment apparatus for irradiating a substrate with flashlight to heat said substrate, comprising:  
a light source having a plurality of flash lamps;  
a chamber provided below said light source;  
a holding member for holding a substrate in said chamber; and  
a light shield provided in said chamber, said light shield blocking light emitted from said light source from reaching a metal surface inside said chamber,

~~The heat treatment apparatus according to claim 1,~~ wherein  
said light shield has a roughened outer surface and an inner surface having greater smoothness than said outer surface.

**14. (New)** The heat treatment apparatus according to claim 13,  
wherein said chamber has a metallic side plate and a metallic bottom plate; and  
wherein said light shield has a closed-end cylindrical shape for covering inner wall surfaces of said side plate and said bottom plate.

**15. (New)** The heat treatment apparatus according to claim 14,  
wherein said light shield is a divided member in which a tubular portion and a base portion are separable.

**16. (New)** The heat treatment apparatus according to claim 15,  
wherein said light shield covers said metal surface inside said chamber in its entirety.

**17. (New)** The heat treatment apparatus according to claim 16,  
wherein said outer surface has average surface roughness of not less than 0.2 $\mu$ m.

**18. (New)** A heat treatment apparatus for irradiating a substrate with flashlight to heat said substrate, comprising:  
a light source having a plurality of flash lamps;

a chamber provided below said light source;  
a holding member for holding a substrate in a substantially horizontal position in said chamber; and  
a liner removably provided at said chamber, along an inner wall side surface and an inner wall base surface of said chamber to cover said side and base surfaces,  
wherein said light shield is a quartz member with a quartz surface roughened by honing.

**19. (New)** The heat treatment apparatus according to claim 18,  
wherein said liner has a closed-end cylindrical shape.

**20. (New)** The heat treatment apparatus according to claim 19,  
wherein said liner is a divided member in which a tubular portion and a base portion are separable.